Course Syllabus

# Course Prefix, Number, and Title:

CSC250-DF1, #16655, Computer Science II

CSC250-DT2, 16653, Computer Science II

# Credits:

3

# University Name:

Dakota State University

# Academic Term/Year:

Spring 2021, January 11, 2021 – May 6, 2021

## Last date to Drop and receive 100% refund:

January 20, 2021

## Last date to Withdraw and earn a grade of 'W':

April 6. 2021

# Course Meeting Time and Location:

Mon/Wed, 1:00-2:15 pm, Online Synchronous, Virtually meet in ZOOM

# Instructor Information:

## Name:

Barbara Myers

## Office:

CCSF, FSC1, Room 226—all meetings with instructor will be in ZOOM

## Phone Number(s):

605-274-9566

## Email Address:

[Barbara.myers@dsu.edu](mailto:Barbara.myers@dsu.edu)

**Office Hours (All virtual):**

All office hours are virtual. Mon, 7-9 pm; Tues, 10 am to noon; Wed, 7-9 pm; Thur, 1-3 pm.

\*If you need to schedule a time outside class times, please use this link (<https://calendly.com/barbara-myers>) to schedule a time to meeting with me. Appointments here will be ½ hour in length.

# Approved Course Description:

## Catalog Description:

Problem solving, algorithm design, standards of program style, debugging and testing, extension of the control structures and data structures of the high-level language introduced in Computer Science I. Elementary data structures and basic algorithms that include sorting and searching. Topics include more advanced treatment of functions, data types such as arrays and structures, and files.

## Additional Course Information:

**Modifications to the Course:** The instructor reserves the right to make adjustments to the syllabus during the course of the semester in order to better meet the needs of the students.

# Prerequisites:

## Course Prerequisite(s):

CSC150

## Technology Skills:

Students will be required to use Microsoft Office Suite, Microsoft OneNote, Internet, and email. Classroom assignments and materials will also be posted on D2L. Other technology software and skills will be covered in the course.

Students will be provided a virtual environment within which to work. It is highly recommended that you use this environment for coding and developing the work required for class.

# Course Materials:

## Required Textbook(s):

Deitel & Deitel, C How to Program, 8th Edition, Pearson.

Your instructor has selected First Day Access as a means to deliver your course materials. First Day Access is just like it sounds...you will be able to get your course materials on the “first day of class.” You do not need to purchase additional course materials for this class.

With First Day Access, students are able to access eBooks (and other course materials the instructor chooses) within their D2L on the first day of class. First Day Access is more affordable than traditional textbooks, and students are automatically billed through their student accounts. If you opt out of first day access, it is your responsibility to ensure that you have the book and are able to complete the work that will be assigned.

## Required Supplementary Materials:

Students must have high-speed internet access and administrative permissions on their PC. Windows 10 is preferred; you are welcome to use other operating systems as well, but Help Desk support may not be available.

## Optional Materials:

Notepad, paper, pen/pencil are highly recommended for note taking, but are not mandatory.

# Student Support:

## DSU Knowledge Base:

The DSU Knowledge Base contains links and resources to help students by providing information about the following topics: User Accounts & Passwords, Academic Tools & Resources, Software & Apps Support, WiFi & Network Access, Campus Emergency Alert System, Campus Printing, IT Security & Safe Computing, and the Support Desk (which is there to help both on and off-campus students). The Knowledge Base can be accessed through the link below:

* [DSU Knowledge Base](https://support.dsu.edu/TDClient/KB/)

## D2L Support for Students:

The D2L Support for Students site is designed to provide DSU students a D2L support resource center that contains user guides, tutorials, and tips for using the D2L learning environment. The D2L Support for Students site can be accessed through the link below:

* [DSU D2L Support Resources for Students](https://d2l.sdbor.edu/d2l/home/606414)

# Course Delivery and Instructional Methods:

Class times will consist of lecture-based delivery during a virtual class time and will include working on and asking questions about the assignments, projects, and quizzes. Outside of class students will work on assignments, quizzes, and projects. Students will use D2L to get assignment information as well as submitting work due.

Assignments and assessments will be released when we start a chapter in class. Assignments need to be completed by the scheduled date and time in D2L. DO NOT email them to me—they will not be accepted.

# Classroom Policies:

## Attendance and Make-up Policy:

Although attendance is not included as part of your overall grade, attendance is strongly encouraged. Students are responsible for all materials presented during the class period.

Often there are instructions, extensions, and other very useful information that is only given verbally during class times and not posted on D2L or sent out via email. No attending class means you may miss out on this information which could result in poor performance in this class.

There will be no makeup quizzes or assignments. In the case of a documented, excusable absence on an exam da (notification of the instructor should be done as soon as possible). Failure to makeup the exam within 1 week of the exam due date will result in a 0 for that exam.

## Accessibility Statement:

Dakota State University strives to ensure that physical resources, as well as information and communication technologies, are accessible to users in order to provide equal access to all. If you encounter any accessibility issues, you are encouraged to immediately contact the instructor of the course and Dakota State University's ADA Office, which will work to resolve the issue as quickly as possible.

DSU's ADA Office is located in the Learning Engagement Center and can be contacted by calling 605-256-5121 or emailing [dsu-ada@dsu.edu](mailto:dsu-ada@dsu.edu). Students seeking ADA accommodations (such as non-standard note taking or extended time and/or a quiet space taking exams and quizzes) can log into the DSU portal to access <https://portal.sdbor.edu/dsu-student/student-resources/disability-services/Pages/default.aspx/> for additional information and the link to the Disability Services Request Form. You will need to provide documentation of your disability and the ADA Coordinator must confirm the need before officially authorizing accommodations. NOTE: If you are not a DSU student, you should contact your home campus ADA coordinator.

## Academic Honesty Statement:

Cheating and other forms of academic dishonesty run contrary to the purpose of higher education and will not be tolerated in this course. Please be advised that, when the instructor suspects plagiarism, the Internet and other standard means of plagiarism detection will be used to resolve the instructor’s concerns. The South Dakota Board of Regents Student Academic Misconduct Policy can be found here: [SDBOR Policy 2.33](https://www.sdbor.edu/policy/Documents/2-33.pdf).

All forms of academic dishonesty will result in a 0 for the assignment and appropriate action based on the SDBOR policy will take place.

# Communication and Feedback:

## Preferred Email Contact Method:

All email communication will be sent to [barbara.myers@dsu.edu](mailto:barbara.myers@dsu.edu). When emailing please make sure you include the class and time of the class (example: CSC250, M/W, 1-2:15 pm) in the subject line so that I can easily distinguish which course you are enrolled in.

## Email Response Time:

I generally respond to email within 24 hours. Response time may be a little longer on weekends and holidays.

## Feedback on Assignments:

Note that assignment grades and feedback will be given within one week of the assignment’s due date. When I am unable to meet this deadline, students will be notified via email to notify them of an alternate time for completion.

## Requirements for Course Interaction:

This course does not require course interaction between students. If students interact through a form of electronic communication, please remember to be respectful of each other. If a student feels communication from another student is inappropriate, contact the instructor right away.

**Student Learning Outcomes:**

1. By the end of the semester, students will be proficient in basic software programming. The specific skills and competencies should include, but are not limited to:
2. CSC 150 review: loops, functions, arrays
3. File I/O: fopen, fscanf, fprintf, fgets, end-of-file
4. Multi-dimension arrays
5. Searching an array
6. Sorting with bubble or selection sort
7. Recursion
8. Structures
9. Pass-by-value; Pass-by-reference
10. Pointer, \*, &
11. Dynamic memory allocation
12. Linked list (create a node, traversal, insert front/back)
13. Abstract data types (interface & implementation)
14. ADT functions/operations vs. data representation
15. Stack or queue [ array & linked ]
16. Splitting code into .h & .c files

**Evaluation Procedures:**

**Assessments:**

|  |  |
| --- | --- |
| Grade | Percentage of grade |
| Assignments | 55% |
| Chapter Quizzes | 20% |
| Exams | 25% |
| Total | 100% |

**Final Examination/Final Project:**

Final exam/final project will be given/due on the final day of class.

**Performance Standards and Grading Policy**

|  |  |
| --- | --- |
| Grade | Percentage Needed |
| A | Above 90% |
| B | 80-89.99 |
| C | 70-79.99 |
| D | 60-69.99 |
| F | Below 60 |

Grades will not be rounded up so do not ask for this. Example, if you have an 89.7; your grade will be a B.

## Student Verification Statement and Proctoring Policy:

Federal law requires that universities verify the identity of students when course materials and/or course assessment activities are conducted either partially or entirely online. A student’s Desire2Learn (D2L) login and password are intended to provide the student with secure access to course materials and are also intended to help the university meet this federal mandate. Some DSU Faculty also require the use of a proctor for exams in distance-delivered (Internet) courses and this requirement provides a second level of student identity verification. Students are responsible for any proctoring fees, if applicable. Finally, an instructor who uses web conferencing technology may require students to use a webcam during exams, as another means of student identity verification through voice and visual recognition.

# Tentative Course Outline and Schedule:

| Week | Date | Topics, Assignments, Quizzes, Tests, Deadlines |
| --- | --- | --- |
| 1 | 1/11/21 | Class Information  Syllabus  Schedule  Book Access |
|  | 1/13/21 | Virtual Environment |
| 2 | 1/18/21 | No Class Day—Martin Luther King Holiday |
|  | 1/20/21 | Review—Decision Making |
| 3 | 1/25/21 | Review—Looping |
|  | 1/27/21 | Review—Functions |
| 4 | 2/1/21 | Review—Arrays (1 Dimension) |
|  | 2/3/21 | Review—Arrays (2 Dimension) and Strings |
| 5 | 2/8/21 | Exam 1 |
|  | 2/10/21 | Pointers |
| 6 | 2/15/21 | No Class Day—President’s Day Holiday |
|  | 2/17/21 | Pointers |
| 7 | 2/22/21 | Pointers |
|  | 2/24/21 | Pointers |
| 8 | 3/1/21 | Structures, Unions, Manipulation and Enumeration |
|  | 3/3/21 | Structures, Unions, Manipulation and Enumeration |
| 9 | 3/8/21 | No Class Day—Spring Break |
|  | 3/10/21 | No Class Day—Spring Break |
| 10 | 3/15/21 | Links, Queues, and Stacks |
|  | 3/17/21 | Links, Queues, and Stacks |
| 11 | 3/22/21 | Manipulation and Enumeration |
|  | 3/24/21 | Manipulation and Enumeration |
| 12 | 3/29/21 | File Processing |
|  | 3/31/21 | File Processing |
| 13 | 4/5/21 | Exam 2 |
|  | 4/7/21 | Data Structures |
| 14 | 4/12/21 | Data Structures |
|  | 4/14/21 | Preprocessor |
| 15 | 4/19/21 | Preprocessor |
|  | 4/21/21 | Miscellaneous Topics in C |
| 16 | 4/26/21 | Introduction to C++ |
|  | 4/28/21 | Introduction to C++ |
| 17 | 5/3/21 | TBD |
|  | 5/5/21 | Exam 3 |

# Freedom in Learning Statement:

Students are responsible for learning the content of any course of study in which they are enrolled. Under Board of Regents and University policy, student academic performance shall be evaluated solely on an academic basis and students should be free to take reasoned exception to the data or views offered in any course of study. It has always been the policy of Dakota State University to allow students to appeal the decisions of faculty, administrative, and staff members and the decisions of institutional committees. Students who believe that an academic evaluation is unrelated to academic standards but is related instead to judgment of their personal opinion or conduct should contact the dean of the college which offers the class to initiate a review of the evaluation.

# COVID-19: Protection of Yourself and Others:

*Please refer to the DSU coronavirus site for more information: https://dsu.edu/emergency-alerts/coronavirus-update.html*

The virus is thought to spread mainly from person-to-person between people who are in close contact with one another (within about 6 feet). **Currently, cloth face coverings/masks are required in all indoor public spaces on campus.**Keep in mind that recent studies have indicated that COVID-19 may be spread by people who are not showing symptoms. You could spread COVID-19 to others even if you do not feel sick. Students who fail to comply with this policy may be subject to disciplinary action.

**Put distance between yourself and other people by keeping about 6 feet between yourself and others.**The cloth face covering is not a substitute for social distancing.

**Wash your hands**often with soap and water for at least 20 seconds especially after you have been in a public place, or after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use a hand sanitizer. **Clean AND disinfect frequently touched surfaces**.

**Stay home if you are sick**and avoid close contact with people who are sick. If you exhibit symptoms consistent with the coronavirus (fever or chills, cough, shortness of breath or difficulty breathing, fatigue, muscle or body aches, headache, new loss of taste or smell, sore throat, congestion or runny nose, nausea or vomiting, diarrhea), you are to notify the Vice-President of Student Affairs.